

NORTH CAROLINA GENERAL ASSEMBLY

LEGISLATIVE ACTUARIAL NOTE

BILL NUMBER: House Bill 168, Proposed Senate Committee Substitute

SHORT TITLE: Appropriations Act of 1999, Sections 28.28 and 28.29.

SPONSOR(S): Sen. Aaron Plyler, Sen. Beverly Perdue, Sen. Fountain Odom.

SYSTEM OR PROGRAM AFFECTED: Teachers' and State Employees' Comprehensive Major Medical Plan.

FUNDS AFFECTED: State General Fund, State Highway Fund, Other State Employer Receipts, Premium Payments for Dependents by Active and Retired Teachers and State Employees, and Premium Payments for Coverages Selected by Eligible Former Teachers and State Employees.

BILL SUMMARY: Section 28.28: The section "carves out" outpatient prescription drug benefits from the rest of the benefits of the Plan's self-insured indemnity program. In doing so, outpatient prescription drug claims would not be subject to the program's annual deductible and coinsurance provisions which are paid by the program's members. Instead, members of the program would pay a copayment amount per prescription to pharmacies at the time of purchase and pharmacies would, in turn, be reimbursed by the program for the remainder of allowable charges. The copayments for each prescription required by the section are pharmacy charges up to \$10 for each generic drug, \$15 for each brand-name drug, and \$20 for each brand-name drug for which there is a generic equivalent. For the purposes of these copayments, a daily supply limit per prescription is capped at 34 days. Prescriptions for more than a 34-day supply would result in multiple copayment amounts. Allowable charges are 90% of a drug's average wholesale price plus a pharmacy dispensing fee of \$6.00 per prescription. These are the same allowable charges for outpatient prescription drug claims that the General Assembly authorized for the Health Insurance Program for Children in April of 1998. Pharmacies are prohibited from balance billing members of the Plan's indemnity program whenever the pharmacies accept a member's copayment and the Plan's remaining allowable charges, if any. Section 28.29: The section allows eligible firemen and rescue squad workers and their eligible spouses and dependent children the opportunity to voluntarily participate in the benefits of the Teachers' and State Employees' Comprehensive Major Medical Plan's indemnity program and health maintenance organizations (HMOs). Eligible firemen are firefighters employed by a political subdivision of the State or who are volunteer firefighters who operate fire apparatus and equipment with at least \$5,000 in value, and who participate in at least 36 hours of fire drills and meetings annually. Eligible rescue squad workers are members of a rescue or emergency medical services squad that is eligible for membership in the North Carolina Association of Rescue and Emergency Medical Services, Inc., and who attended at least 36 hours of training and meetings in the previous year. Each fire department and rescue or emergency medical services squad certifies eligibility of its members to the Department of State Treasurer annually. Former firemen and rescue squad workers receiving a pension from the North Carolina Firemen's and Rescue Squad Workers' Pension Fund upon the completion of 20 years of fire or rescue squad service at age 55 are also allowed the opportunity to participate in the Plan's benefits along with their eligible dependents. Participation in the Plan's benefits is contingent upon current and retired firefighters and rescue squad workers and their dependents being ineligible for any other type of comprehensive group health insurance or other comprehensive group health benefits. Participation is also limited to those otherwise eligible participants who have been without any form of group health insurance or other group health benefit coverage for at least six months. Comprehensive group health benefits include Medicare benefits, CHAMPUS, and other uniformed services benefits. Premiums for all current and retired firefighters and rescue squad workers who elect to

participate in the Plan's benefits will be fully contributory for themselves and their dependents. These premiums will be established separate and apart from the Plan's premiums for teachers, state employees, retired teachers and state employees, and their dependents to reflect separate claims experiences. Premiums for current and retired firefighters and rescue squad workers and their dependents will also include factors for incurred but unreported claims, the effects of adverse selection from voluntary participation, and any other actuarial measures needed to protect the financial integrity of the Plan.

The section also allows actively serving members of the North Carolina Army and Air National Guard and their eligible spouses and dependent children the opportunity to voluntarily participate in the benefits of the Teachers' and State Employees' Comprehensive Major Medical Plan's indemnity program and health maintenance organizations (HMOs). Former active members of the National Guard who have completed at least twenty years of Guard service but have not reached the minimum age to begin receipt of a uniformed service retirement benefit are also allowed the opportunity to participate in the Plan's benefits along with their eligible dependents. Participation in the Plan's benefits for actively serving members of the Guard and eligible former members of the Guard is contingent upon them and their dependents being ineligible for any other type of comprehensive group health insurance or other comprehensive group health benefits. Participation is also limited to those otherwise eligible participants who have been without any form of group health insurance or other group health benefit coverage for at least six months. Comprehensive group health benefits include Medicare benefits, benefits of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), Uniformed Service Hospital benefits, and any other health benefits for the uniformed services. Consequently, retired members of the North Carolina National Guard drawing a state or federal Guard pension and their families and survivors are not included in the section since they are eligible for health benefits through Uniformed Service Hospitals and CHAMPUS. Federal and North Carolina pensions for retired National Guard members begin at age 60 with 20 years of military service.

Premiums for all members of the National Guard who elect to participate in the Plan's benefits will be fully contributory for themselves and their dependents. These premiums will be established separate and apart from the Plan's premiums for teachers, state employees, retired teachers and state employees, and their dependents to reflect separate claims experiences. Premiums for National Guard members and their dependents will also include factors for incurred but unreported claims, the effects of adverse selection from voluntary participation, and any other actuarial measures needed to protect the financial integrity of the Plan.

EFFECTIVE DATE: Section 28.28: January 1, 2000; Section 28.29: July 1, 2000.

ESTIMATED IMPACT ON STATE: Section 28.28: Based upon information supplied by the Teachers' and State Employees' Comprehensive Major Medical Plan, the consulting actuary for the Plan, Aon Consulting, estimates the additional cost to the Plan's indemnity program to be \$4,939,000 for 1999-2000 and \$16,297,000 for 2000-2001. Based upon the same information supplied by the Plan, the consulting actuary for the General Assembly's Fiscal Research Division, Hartman & Associates, estimates the additional cost to the Plan's indemnity program to be \$5,021,059 for 1999-2000 and \$17,979,707 for 2000-2001. A combined estimate from the two actuaries on the additional cost to the Plan's indemnity program is \$4,980,000 for 1999-2000 and \$17,138,400 for 2000-2001. The estimated additional costs for the Plan's indemnity program for outlying years are \$19,709,000 for fiscal year 2001-2002, \$22,665,000 for fiscal year 2002-2003, and \$26,065,000 for fiscal year 2003-2004.

These additional costs to the Plan's indemnity program will be covered by a projected increase in the program's premium rates effective October 1, 1999. The additional costs from the section will increase the projected premium rate increase for the program from 28% to 30% in October, 1999. Including the same amount of increased employer costs to the Plan's indemnity program for employees and retired employees covered in the nine health maintenance organizations (HMOs) would result in total employer-funded costs as follows:

<u>Source of Funds</u>	<u>1999-2000</u>	<u>2000-2001</u>
General Fund	\$10,000,000	\$12,000,000
Highway Fund	1,000,000	1,000,000
Other Employer Funds	1,300,000	1,600,000
Total Employer Funds	\$12,300,000	\$14,600,000

Section 28.29: The consulting actuary for the Plan, Aon Consulting, and the consulting actuaries of the General Assembly's Fiscal Research Division, Dilts, Umstead & Dunn and Hartman & Associates, all estimate that the Plan will incur some administrative expense for implementing and monitoring the payment of the benefits provided by the section. However, such expenses are expected to be negligible and to be recovered by premiums paid by current and retired firefighters and rescue squad workers and members of the National Guard electing to purchase the benefits for themselves and their dependents. The actual claim costs for the benefits provided by the section will also be paid by those electing to purchase the benefits through fully contributory premiums. Consequently, no additional claim costs are expected to be borne by the Plan through employer-provided funds except for cases of extreme anti-selection.

ASSUMPTIONS AND METHODOLOGY: The Comprehensive Major Medical Plan for Teachers and State Employees is divided into two programs. From October, 1982, through June, 1986, the Plan had only a self-funded indemnity type of program which covered all employees, retired employees, eligible dependents of employees and retired employees, and eligible former employees and their eligible dependents authorized to continue coverage past a termination of employment other than for retirement or disability purposes. A prepaid program of coverage by health maintenance organizations (HMOs) was offered in July, 1986, as an alternative to the Plan's self-insured indemnity program. The benefits of the self-insured indemnity type of program are spelled out in Part 3 of Article 3 of Chapter 135 of the North Carolina General Statutes (i.e., \$250 annual deductible, 20% coinsurance up to \$1,000 annually, etc. paid by the program's members). HMOs are required to offer benefits that are comparable to those provided by the self-insured indemnity program. Employer-paid non-contributory premiums are only authorized for the indemnity program's coverage for employees and retired employees. Whenever employees and office holders first employed or taking office on and after October 1, 1995 become eligible for health benefits as retired employees, the amount of premium paid by the State for individual coverage will be based upon the retiree's amount of retirement service credit at the time of retirement. Only retired employees with 20 or more years of service credit at retirement will be eligible for non-contributory health benefit premiums. Retirees with 10 or more years of service credit at retirement will be eligible for 50% partially contributory health benefit premiums. Retired employees with 5 or more year of service credit at retirement will be eligible to continue their health benefits on a fully contributory basis. All other types of premium in the indemnity program are fully contributory.

Premiums paid by employers to HMOs are limited to like amounts paid to the indemnity program with employees and retired employees paying any HMO amounts above the indemnity program's non-contributory rates. Both types of coverage continue to be available in the Plan with nine HMOs currently covering about 25% of the Plan's total population in 66 of the State's 100 counties. The Plan's employees and retired employees select the type of program that they wish for themselves and their dependents during the months of August and September of each year for coverage beginning in October. The demographics of the Plan as of December 31, 1998, include:

<u>Number of Participants</u>	<u>Self-Insured Indemnity Program</u>	<u>Alternative HMOs</u>	<u>Plan Total</u>
Active Employees	192,800	74,400	267,200

Active Employee Dependents	107,400	52,200	159,600
Retired Employees	91,600	6,700	98,300
Retired Employee Dependents	15,600	1,300	16,900
Former Employees & Dependents with Continued Coverage	2,700	700	3,400
Total Enrollments	410,100	135,300	545,400

Number of Contracts

Employee Only	217,400	55,100	272,500
Employee & Child(ren)	30,600	16,500	47,100
Employee & Family	38,400	9,900	48,300
Total Contracts	286,400	81,500	367,900

Percentage of
Enrollment by Age

29 & Under	27.0%	44.3%	31.3%
30-44	20.2	26.5	21.7
45-54	20.8	18.5	20.2
55-64	14.6	8.0	13.0
65 & Over	17.4	2.7	13.8

Percentage of
Enrollment by Sex

Male	39.5%	39.2%	39.5%
Female	60.5	60.8	60.5

Assumptions for the Self-Insured Indemnity Program: For the fiscal year beginning July 1, 1998, the self-insured program started its operations with a beginning cash balance of \$334.1 million. Receipts for the year are estimated to be \$590 million from premium collections, \$20 million from investment earnings, and \$15 million in risk adjustment and administrative fees from HMOs, for a total of \$625 million in receipts for the year. Disbursements from the self-insured program are expected to be \$720 million in claim payments and \$19 million in administration and claims processing expenses for a total of \$739 million for the year beginning July 1, 1998. For the fiscal year beginning July 1, 1999, the self-insured indemnity program is expected to have an operating cash balance of over \$220 million with a net operating loss of \$185 million for the 1999-2000 fiscal year. For the fiscal year beginning July 1, 2000, the self-insured indemnity program is expected to have an operating cash balance of \$35 million with a net operating loss of \$270 million for the 2000-2001 fiscal year. The self-insured indemnity program is consequently assumed to be unable to carry out its operations for the 1999-2001 biennium without increases in its current premium rates or a reduction in existing benefits or both. This assumption is further predicated upon the fact that the program's cost containment strategies (hospital DRG reimbursements, pre-admission hospital testing, pre-admission hospital inpatient certification with length-of-stay approval, hospital bill audits, required second surgical opinions, mental health case management, coordination of benefits with other payers, Medicare benefit "carve-outs", cost reduction contracts with participating physicians and other providers, prescription drug manufacturer rebates from voluntary formularies, and fraud detection) are maintained and improved where possible. Current non-contributory premium rates are \$110.08 monthly for employees whose primary payer of health benefits is Medicare and \$144.60 per month for employees whose primary payer of health benefits is not Medicare. Fully contributory premium amounts for employee and child(ren) contracts are \$68.50 monthly for children whose primary payer of health benefits is Medicare and \$90.12 monthly for other covered children, and \$164.30 per month for family contracts whose dependents have Medicare as the primary payer of health benefits and \$216.18 per month for other family contract dependents.

Claim cost trends are expected to increase 8-10% annually. Total enrollment in the program is expected to decrease about one percent (1.0%) annually due to competition from alternative HMOs. The number of enrolled active employees is expected to show a 1-2% loss annually, whereas the growth in the number of retired employees is assumed to be 4% per year. The program is expected to lose about 2-3% of its number of active employee dependents each year, whereas the number of enrolled retiree dependents is assumed to grow 1-2% from year to year. Investment earnings are based upon a 5-6% monthly return on available cash balances. The self-insured indemnity program maintains a claim stabilization reserve for claim cost fluctuations equal to 7.5% of annual claim payments without reserving additional funds for incurred but unreported claims.

Assumptions for the Self-Insured Indemnity Program's Outpatient Prescription Drug Claims: For the last several fiscal years, claims experience for outpatient prescription drug in the Plan's indemnity program has been:

Type of Drug	1993-94	1994-95	1995-96	1996-97	1997-98
<u>Brand Drugs</u>					
Number of Prescriptions	1,669,915	1,773,974	1,876,122	2,024,409	2,186,890
% Change	3.2%	6.2%	5.8%	7.9%	8.0%
Total Charges	\$67,810,329	\$75,430,295	\$84,613,583	\$98,409,330	\$115,927,964
% Change	8.0%	11.2%	12.2%	16.3%	17.8%
Total Allowed Charges	\$59,352,084	\$66,316,612	\$74,410,827	\$86,682,862	\$101,337,962
% Change	9.1%	11.7%	12.2%	16.5%	16.9%
Allowed Charges Applied					
to Deductible	\$12,140,282	\$12,648,434	\$14,127,198	\$15,264,043	\$16,357,937
% Change	7.6%	4.2%	11.7%	8.0%	7.2%
Allowed Charges Applied					
to Coinsurance	\$8,452,054	\$9,625,021	\$10,818,606	\$12,753,872	\$15,109,477
% Change	8.5%	13.9%	12.4%	17.9%	18.5%
Total Paid	\$38,759,748	\$44,043,157	\$49,465,023	\$58,664,947	\$69,870,548
% Change	9.7%	13.6%	12.3%	18.6%	19.1%
<u>Brand Drugs with Generics</u>					
Number of Prescriptions	431,975	417,947	374,943	336,173	334,814
% Change	-3.6%	-3.2%	-10.3%	-10.3%	-0.4%
Total Charges	\$13,122,995	\$13,314,333	\$12,785,948	\$12,313,930	\$13,539,502
% Change	6.1%	1.5%	-4.0%	-3.7%	10.0%
Total Allowed Charges	\$10,891,508	\$11,144,910	\$10,760,774	\$10,295,733	\$11,412,600
% Change	8.9%	2.3%	-3.4%	-4.3%	10.8%
Allowed Charges Applied					
to Deductible	\$3,961,211	\$4,154,393	\$3,621,949	\$3,328,113	\$3,267,785
% Change	2.3%	4.9%	-12.8%	-8.1%	-1.8%
Allowed Charges Applied					
to Coinsurance	\$1,282,709	\$1,296,574	\$1,316,847	\$1,264,286	\$1,491,598
% Change	12.3%	1.1%	1.6%	-4.0%	18.0%
Total Paid	\$5,647,588	\$5,693,943	\$5,821,978	\$5,703,334	\$6,653,217
% Change	13.2%	0.8%	2.2%	-2.0%	16.7%
<u>Generic Drugs</u>					
Number of Prescriptions	1,230,443	1,431,276	1,476,145	1,550,269	1,612,914
% Change	15.3%	16.3%	3.1%	5.0%	4.0%

Total Charges	\$17,306,107	\$21,479,694	\$22,937,681	\$24,922,520	\$27,740,795
% Change	26.8%	24.1%	6.8%	8.7%	11.3%
Total Allowed Charges	\$12,914,294	\$16,795,978	\$18,368,094	\$20,227,151	\$22,977,094
% Change	36.7%	30.1%	9.4%	10.1%	13.6%
Allowed Charges Applied					
to Deductible	\$3,113,021	\$4,165,013	\$4,487,481	\$4,774,829	\$4,693,580
% Change	37.6%	33.8%	7.7%	6.4%	-1.7%
Allowed Charges Applied					
to Coinsurance	\$1,763,643	\$2,299,739	\$2,525,996	\$2,792,401	\$3,282,494
% Change	35.4%	30.4%	9.8%	10.5%	17.6%
Total Paid	\$8,037,630	\$10,331,226	\$11,354,617	\$12,659,921	\$15,001,020
% Change	36.7%	28.5%	9.9%	11.5%	18.5%
<u>Compounded Drugs</u>					
Number of Prescriptions	88	100	87	59	62
% Change	-34.3%	13.6%	-13.0%	-32.2%	5.1%
Total Charges	\$12,266	\$5,409	\$4,114	\$2,422	\$3,116
% Change	60.5%	-55.9%	-23.9%	-41.1%	28.7%
Total Allowed Charges	\$12,255	\$5,325	\$4,046	\$2,383	\$2,937
% Change	60.5%	-56.5%	-24.0%	-41.1%	23.2%
Allowed Charges Applied					
to Deductible	\$243	\$176	\$24	\$46	\$118
% Change	-73.1%	-27.6%	-86.4%	91.7%	156.5%
Allowed Charges Applied					
to Coinsurance	\$3,084	\$3,985	\$3,482	\$1,230	\$1,323
% Change	207.5%	29.2%	-12.6%	-64.7%	7.6%
Total Paid	\$8,928	\$1,164	\$540	\$1,107	\$1,496
% Change	55.8%	-87.0%	-53.6%	105.0%	35.1%
<u>Total Drugs</u>					
Number of Prescriptions	3,332,421	3,623,297	3,727,297	3,910,910	4,134,680
% Change	6.3%	8.7%	2.9%	4.9%	5.7%
Total Charges	\$98,251,697	\$110,229,731	\$120,341,326	\$135,648,202	\$157,211,377
% Change	10.6%	12.2%	9.2%	12.7%	15.9%
Total Allowed Charges	\$83,170,141	\$94,262,825	\$103,543,741	\$117,208,129	\$135,730,593
% Change	12.6%	13.3%	9.8%	13.2%	15.8%
Allowed Charges Applied					
to Deductible	\$19,214,757	\$20,968,016	\$22,236,652	\$23,367,031	\$24,319,420
% Change	10.3%	9.1%	6.1%	5.1%	4.1%
Allowed Charges Applied					
to Coinsurance	\$11,501,490	\$13,225,319	\$14,664,931	\$16,811,789	\$19,884,892
% Change	12.4%	15.0%	10.9%	14.6%	18.3%
Total Paid	\$52,453,894	\$60,069,490	\$66,642,158	\$77,029,309	\$91,526,281
% Change	13.5%	14.5%	10.9%	15.6%	18.8%

Increases in the indemnity program's per capita claim costs for outpatient prescription drugs have been 19.0% for 1997-98, 14.5% for 1996-97, 17.0% for 1995-96, 13.0% for 1994-95, and 13.0% for 1993-94.

Assumptions for Firefighter and Rescue Squad Worker Enrollments: As of June 30, 1998, 26,820 firefighters and rescue squad workers had been certified to the Department of State Treasurer by their individual departments and squads for meeting the eligibility requirements contained in the Section 28.29. Some of the characteristics of this population includes:

<u>Age</u>	<u>Number</u>	<u>Percent of Total</u>
19 & Under	255	1.0%
20-29	5,710	21.3
30-39	8,424	31.4
40-49	7,912	29.5
50-59	4,031	15.0
60-64	289	1.1
65 & Over	199	0.7
Total	26,820	100.0%
Percent Male		92.5%
Percent Female		7.5%

In addition, the North Carolina Firemen's and Rescue Squad Workers' Pension Fund was paying pensions to 7,353 retired firefighters and rescue squad workers as of June 30, 1998. Some of the characteristics of this population includes:

<u>Age</u>	<u>Number</u>	<u>Percent of Total</u>
64 & Under	3,047	41.4%
65 & Over	4,306	58.6
Total	7,353	100.0%
Percent Male		98.7%
Percent Female		1.3%

A 1998 study by the Employee Benefit Research Institute (EBRI) in Washington, D.C. on uninsured health benefit populations in the nation and each state provides a basis for estimating the number of uninsured current and retired firefighters and rescue squad workers who could benefit from the Section 28.29. The Institute is a private, nonprofit, nonpartisan organization that has existed since 1978 to provide public policy research and education on economic security and employee benefits. EBRI's 1998 analysis was done on the basis of the U. S. Bureau of the Census's March, 1998, Current Population Survey (CPS). The Institute's estimates for North Carolina's population under age 65 indicates that some 5,500 current and retired firefighters and rescue squad workers and their families could be expected to be without health benefit coverage and be eligible for health care benefits under Section 28.29.

Assumptions for National Guard Enrollments: The North Carolina National Guard had some 12,000 actively serving members in 1997. Some of the characteristics of this population included:

<u>Age</u>	<u>Number of Guard Members</u>	<u>Percent of Total</u>
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19 & Under	940	7.8%
20-29	4,230	35.2
30-39	3,560	29.7
40-49	2,470	20.6
50-59	800	6.7
Total	12,000	100.0%
Percent Male		89.7%
Percent Female		10.3%

These actively serving members of the Guard were located in 150 units throughout North Carolina with 75 counties having at least one unit. The largest unit had over 1,000 members and the smallest unit had some 30 members. According to Guard requirements, these actively serving members are to undergo physical fitness examinations at least once a year and comprehensive medical examinations every 2 to 4 years depending upon age.

The 1998 study by the Employee Benefit Research Institute (EBRI) in Washington, D.C. on uninsured health benefit populations in the nation and each state provides a basis for estimating the number of uninsured Guard members who could benefit from Section 28.29. The Institute's estimates for North Carolina's population under age 65 indicates that some 2,000 actively serving Guard members and their families could be expected to be without health benefit coverage and be eligible for health care benefits under Section 28.29.

SOURCES OF DATA:

- Actuarial Note, Hartman & Associates, House Bill 1458 Proposed Committee Substitute, May 3, 1999, original of which is on file in the General Assembly's Fiscal Research Division.
- Actuarial Note, Aon Consulting, House Bill 1458 As Amended, April 30, 1999, original of which is on file with the Comprehensive Major Medical Plan for Teachers and State Employees and the General Assembly's Fiscal Research Division.
- Actuarial Note, Hartman & Associates, Senate Bill 950, April 20, 1999, original of which is on file in the General Assembly's Fiscal Research Division.
- Actuarial Note, Aon Consulting, Senate Bill 950, May 4, 1999, original of which is on file with the Comprehensive Major Medical Plan for Teachers and State Employees and the General Assembly's Fiscal Research Division.
- Actuarial Note, Dilts, Umstead & Dunn, Senate Bill 434, April 8, 1997, original of which is on file in the General Assembly's Fiscal Research Division.
- Actuarial Note, Aon Consulting, Senate Bill 434, April 14, 1997, original of which is on file with the Comprehensive Major Medical Plan for Teachers and State Employees and the General Assembly's Fiscal Research Division.

TECHNICAL CONSIDERATIONS: None.

FISCAL RESEARCH DIVISION 733-4910

PREPARED BY: Sam Byrd

APPROVED BY: Tom Covington

DATE: Thursday, June 17, 1999



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